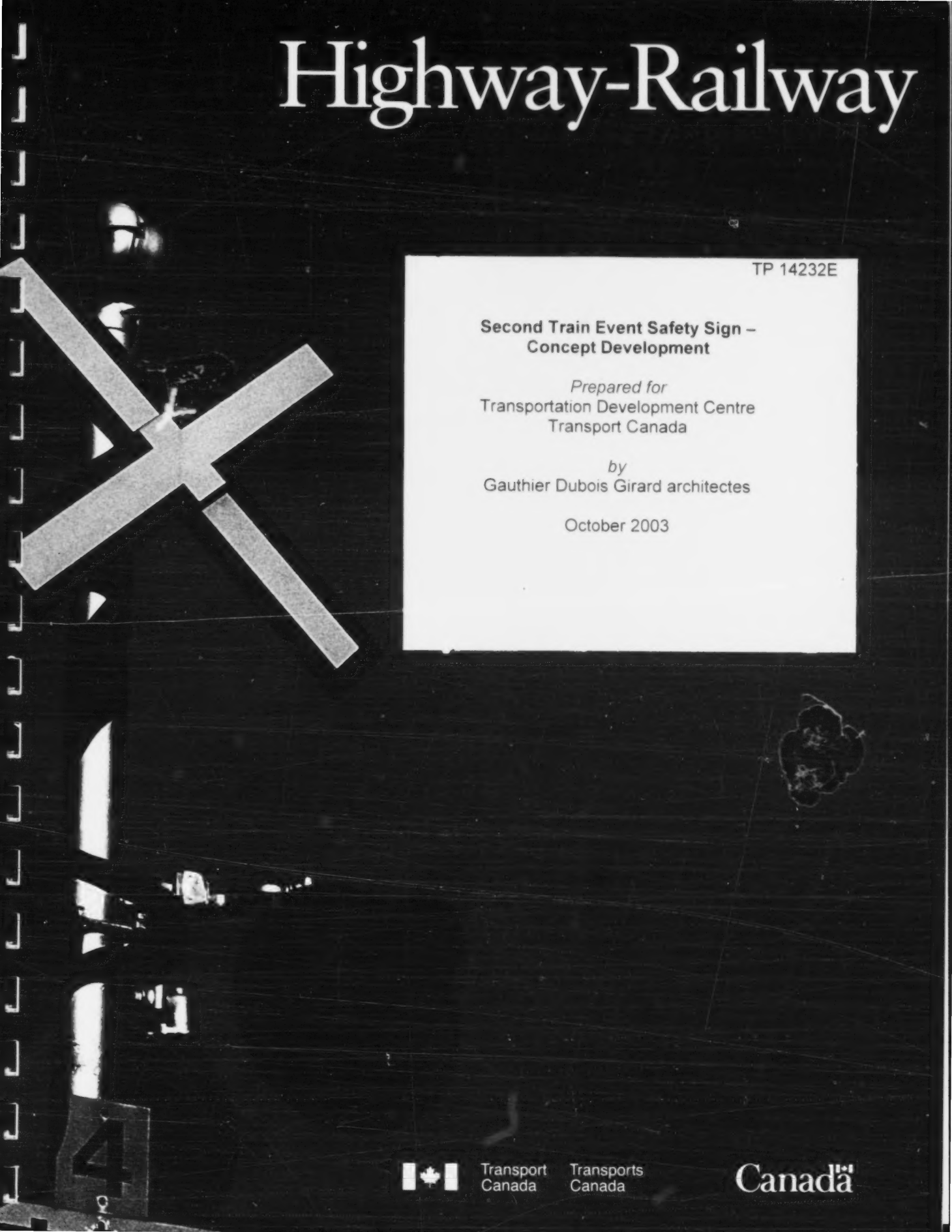
Highway-Railway



TP 14232E

Second Train Event Safety Sign – Concept Development

Prepared for
Transportation Development Centre
Transport Canada

by
Gauthier Dubois Girard architectes

October 2003

Transport Canada Transports Canada

Canada

104-05250/

TP 14232E

Second Train Event Safety Sign – Concept Development

Prepared for
Transportation Development Centre
Transport Canada

by
Gauthier Dubois Girard architectes

October 2003

TP 14232E

Second Train Event Safety Sign – Concept Development

by

É. Girard, D. Cyr, A. Thibeault
I. Charpentier, and R. Saint-Pierre

Gauthier Dubois Girard architectes

October 2003

Notices

This report reflects the views of the authors and not necessarily those of the Transportation Development Centre of Transport Canada or the sponsoring organizations.

FUNDING PARTNERS
Direction 2006 Highway-Railway Grade Crossing Research Program

Transport Canada
Railway Association of Canada
Canadian National Railway
Canadian Pacific Railway
VIA Rail Canada Inc.
Alberta Transportation
Ministère des Transports du Québec

This study is a part of the Highway-Railway Grade Crossing Research Program, an undertaking sponsored by Transport Canada, major Canadian railways, and several provincial authorities. The program is a component of Direction 2006, a cooperative initiative with the goal of halving grade crossing accidents by 2006.

Ce document est également disponible en français : «*Panneau d'avertissement de l'approche d'un autre train – Élaboration d'un concept*», TP 14232F.

Transport Canada / Transports Canada

PUBLICATION DATA FORM

1. Transport Canada Publication No.	2. Project No.	3. Recipient's Catalogue No.
TP 14232E	5358	

4. Title and Subtitle	5. Publication Date
Second Train Event Safety Sign – Concept Development	October 2003
	6. Performing Organization Document No.
7. Author(s)	8. Transport Canada File No.
É. Girard, D. Cyr, A. Thibeault, I. Charpentier and R. Saint-Pierre	ZCD2450-EP736
9. Performing Organization Name and Address	10. PWGSC File No.
Gauthier Dubois Girard architectes 1450 City Councillors, Suite 800 Montreal, Quebec H3A 2E6	MTB-2-01848
	11. PWGSC or Transport Canada Contract No.
	T8200-022541/001/MTB
12. Sponsoring Agency Name and Address	13. Type of Publication and Period Covered
Transportation Development Centre (TDC) 800 René Lévesque Blvd. West Suite 600 Montreal, Quebec H3B 1X9	Final
	14. Project Officer
	Paul Lemay

15. Supplementary Notes (Funding programs, titles of related publications, etc.)

Co-sponsored by the funding partners of the Direction 2006 Highway-Railway Grade Crossing Research program: Railway Association of Canada, Canadian National Railway, Canadian Pacific Railway, VIA Rail Canada Inc., Alberta Transportation, and the ministère des Transports du Québec

16. Abstract

When two or more trains are moving at the same time in urban areas or near stations, pedestrians often experience problems with perception. Very often they are unable to detect the potential presence of a second train on another track. This sometimes results in behaviour indicating that they are unaware of the danger.

To help rectify this situation, Transport Canada contracted Gauthier Dubois Girard architectes to design a second train event safety poster concept that is effective and readily understood. This sign had to be an appropriate warning to users that a second train was moving at the same time as a passenger train was arriving or departing. To help make pedestrians more aware of the danger, the sign had to draw attention without being intrusive.

After a literature review and visits to two sites to observe and understand the problem, Gauthier Dubois Girard Architectes designed a sign to warn pedestrians of the potential presence of a second train. Two prototype signs were then produced and installed at the sites chosen for the project: Montreal West and St. Basile le Grand. To measure the effectiveness of the signs, a survey was conducted in the field for the period of a week.

This report presents the details of the design phase of the second train warning sign for pedestrians and the results of the survey conducted in the field.

17. Key Words	18. Distribution Statement
Grade crossing, sign, second train, warning, pedestrian, station, safety poster	Limited number of copies available from the Transportation Development Centre

19. Security Classification (of this publication)	20. Security Classification (of this page)	21. Declassification (date)	22. No. of Pages	23. Price
Unclassified	Unclassified	—	vi, 23, apps	Shipping/ Handling

Transports Canada / Transport Canada

FORMULE DE DONNÉES POUR PUBLICATION

1. N° de la publication de Transports Canada	2. N° de l'étude	3. N° de catalogue du destinataire
TP 14232E	5358	

4. Titre et sous-titre	5. Date de la publication
Second Train Event Safety Sign – Concept Development	Octobre 2003
	6. N° de document de l'organisme exécutant

7. Auteur(s)	8. N° de dossier - Transports Canada
É. Girard, D. Cyr, A. Thibeault, I. Charpentier et R. Saint-Pierre	ZCD2450-EP736

9. Nom et adresse de l'organisme exécutant	10. N° de dossier - TPSGC
Gauthier Dubois Girard architectes 1450, rue City Councillors, bureau 800 Montréal (Québec) H3A 2E6	MTB-2-01848
	11. N° de contrat - TPSGC ou Transports Canada T8200-022541/001/MTB

12. Nom et adresse de l'organisme parrain	13. Genre de publication et période visée
Centre de développement des transports (CDT) 800, boul. René-Lévesque Ouest Bureau 600 Montréal (Québec) H3B 1X9	Finale
	14. Agent de projet Paul Lemay

15. Remarques additionnelles (programmes de financement, titres de publications connexes, etc.)

Coparrainé par les partenaires financiers du Programme de recherche sur les passages à niveau de Direction 2006 : Association des chemins de fer du Canada, Canadien National, Canadien Pacifique, Via Rail Canada Inc., Alberta Transportation et le ministère des Transports du Québec

16. Résumé

Lorsque deux trains ou plus se déplacent simultanément en milieu urbain ou aux abords des gares, les piétons éprouvent souvent des problèmes de perception. Bien souvent, ils sont incapables de déceler la présence possible d'un deuxième train circulant sur une autre voie ferrée. Il en résulte alors parfois un comportement qui dénote une inconscience du danger.

C'est pour corriger cette situation que la firme Gauthier Dubois Girard architectes a été mandatée par Transports Canada afin de concevoir un panneau de sécurité illustrant la possibilité de la présence d'un deuxième train, efficace et compréhensible. Ce panneau devait être adapté à la problématique du passage d'un deuxième train coïncidant avec l'arrivée ou le départ d'un train de passagers. Afin de sensibiliser les piétons, il fallait élaborer une signalisation qui interpelle sans toutefois être envahissante.

Après une revue de la littérature et une visite de deux sites afin de bien visualiser et comprendre la problématique, les chercheurs ont procédé à la conception d'un panneau de signalisation avertissant de la présence possible d'un deuxième train. Deux panneaux prototypes ont été fabriqués et, par la suite, installés aux deux sites choisis pour le projet, soit à la gare Montréal-Ouest et à Saint-Basile-le-Grand. Afin de bien mesurer l'efficacité des panneaux, un sondage a été effectué sur le terrain auprès des usagers et ce, pendant une semaine.

Ce sont essentiellement les étapes de la conception du panneau de signalisation et les résultats du sondage réalisé sur le terrain qui vous sont présentés dans cette étude.

17. Mots clés	18. Diffusion
Passages à niveau, deuxième train, avertissement, signalisation, piéton, gare, panneau de sécurité	Le Centre de développement des transports dispose d'un nombre limité d'exemplaires.

19. Classification de sécurité (de cette publication)	20. Classification de sécurité (de cette page)	21. Déclassification (date)	22. Nombre de pages	23. Prix
Non classifiée	Non classifiée	—	vi, 23, ann.	Port et manutention

Table of Contents

1.0 Introduction 1

2.0 Methodology 3

3.0 Premises for decision 5
3.1 Message 5
3.2 Appearance 5
3.3 Signage rules 5

4.0 Design aspects 7
4.1 Visual 7
4.2 Manufacture 8
4.3 Installation 9

5.0 Results 11
5.1 Sign selected 11
5.2 Analysis site 11
5.2.1 Montreal West Station 11
5.2.2 Saint-Basile-le-Grand 12
5.3 Location 12
5.3.1 Montreal West Station 12
5.3.2 Saint-Basile-le-Grand 13

6.0 Survey 15
6.1 Objectives 15
6.2 Methodology 15
6.3 Results 16
6.3.1 Profile of respondents 16
6.3.2 Notice taken of sign 17
6.3.3 Understanding of sign 18

7.0 Conclusion 23

Appendix A Location

Appendix B Installation criteria

Appendix C Questionnaire

Appendix D Detailed statistical tables

Figure 1 Yellow square shape resting on a corner 7
Figure 2 Standard sign I-310 – railway station 7
Figure 3 Panel 1 8
Figure 4 Panel 2 8
Figure 5 Montreal West Station district 11
Figure 6 Saint-Basile-le-Grand district 12
Figure 7 Montreal West site 12
Figure 8 Saint-Basile-le-Grand site 13
Figure 9 Have you seen this sign before? 17
Figure 10 Place where sign was seen 18
Figure 11 Meaning of sign 19
Figure 12 Aspects of the sign that led to interpretation (respondents for whom the sign meant "Crossing the tracks is forbidden") 20
Figure 13 Aspects of the sign that led to interpretation (respondents for whom the sign meant "You may (must) not cross the tracks when a train is coming") 21

Table 1 Sign type and dimensions 9
Table 2 Location, date and language 15
Table 3 Margin of error for various proportions 16
Table 4 Gender, age and education 16
Table 5 Place of birth and number of visits 17

1.0 Introduction

Many grade crossings in urban areas or at stations pose a perception problem when more than one train is moving at the same time or in the immediate area. With passenger and freight trains arriving, departing or simply passing through, warning devices must be installed. When one of these situations arises, pedestrians waiting on either side of the tracks must be extremely careful when crossing them. Moreover, the loud metallic noise made by a train passing usually prevents pedestrians from hearing whether a second train might be coming.

That is why the team was mandated by Transport Canada to design a visual communication component that is effective, readily understood and appropriate in order to warn users about a second train passing at grade crossings and in stations. We have accordingly developed a sign that will catch a pedestrian's attention without being intrusive. This sign should be immediately deciphered and understood by pedestrians in order to alert them to the risk.

2.0 Methodology

To design a sign tailored to the problem identified, we adopted the following methodology:

1. Collect information and review studies done on grade crossings;
2. Visit two sites to closely observe and understand the problem;
3. Read and analyse the literature on grade crossings;
4. Hold a brainstorming session to design a sign appropriate to the problem;
5. Produce a preliminary design of the sign warning of the passage of a second train;
6. Present it to the Transport Canada representatives;
7. Modify, adjust and choose the design;
8. Supervise the production of a prototype sign;
9. Together with the partners, develop the conceptual basis for the survey;
10. Submit a methodology for measuring comprehension of the prototype sign in the field;
11. Conduct the survey in the field to measure the effectiveness of the sign;
12. Present the results of the field survey.

3.0 Premises for decision

3.1 Message

The aim of the message is to warn pedestrians who are tempted to cross railway tracks that a stationary or moving train may be hiding another approaching train on the second track. Thus the message involves four components:

- the pedestrian;
- the pedestrian railway crossing;
- a stationary or moving train;
- a second moving train that is out of the pedestrian's field of view.

3.2 Appearance

The composition of the sign must be simple, it must stress the potential danger, and it must be easily understood by everyone.

To be clear and concise, the sign must use uncluttered lines and a language known to the users. It must avoid information overload and must show the composition of all the components in a homogeneous whole.

To stress the potential danger, the sign must draw attention to the movement of the second train. This aspect must be highlighted in contrasting manner in the composition of the sign.

To make the sign readily understood by everyone across Canada, the sign must be free of any regional or stylistic text or representation. The sign's message must reach as many people as possible.

3.3 Signage rules

Warning signs must always be clear and concise. For that reason we wanted to respect the rules governing road signs all around us, so that the message would be quickly and easily understood by users. The standards for Canadian road signs prescribe the colour, shape, lettering and logotypes to be used. These rules must be followed for all signs.

4.1 Visual

Colour and shape

Figure 1: Yellow square shape resting on a corner

Transportation Association of Canada (TAC) standards stipulate that warning signs must be **yellow in colour and in the shape of a square resting on a corner (diamond-shaped)**. The sign being designed is in this category, since it warns users of a particular situation, mainly people who are not familiar with rail traffic at grade crossings (see TAC A 3.1.4) (Across Canada-TAC). Thus it is important to use yellow as the background colour, and the diamond shape mentioned earlier, so that users will understand the importance of the message and the warning being given from the sign's colour and shape (Figure 1).

Lettering and logotype

The lettering to be used on road signs is the *Standard Alphabet for Highways*. There are a number of lettering categories, in series from B to E. To design our sign, we must use series B lettering.

As for the logotypes, we must use those that are currently standardized. Thus the following components must be found on pedestrian warning signs posted at railway tracks: a railway track, a train and a pedestrian. These three graphic components are found on standard sign I-310, which indicates a railway station (Figure 2).

Design elements to be avoided

So that the sign will be clear and concise, it is important that it be homogeneous. Homogeneous signage enables users to orient themselves and quickly understand the message. Thus we must avoid placing **too much information on one sign** (too many graphic components) or **stylizing the signs** (too many graphic details). A road sign that is too detailed does not capture a user's attention in the time allowed to read it and to assimilate its message.

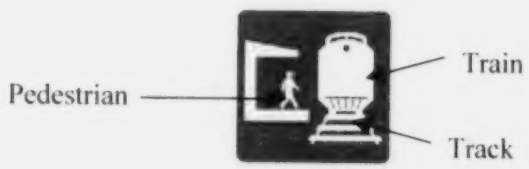


Figure 2: Standard sign I-310 – railway station

4.1 Visual (continued)

The first type of sign (Figure 3) uses two panels mounted on a pole. The warning sign (600 mm x 600 mm, with the points up and down) contains the main message, and the panel mounted below it (300 mm x 600 mm) reinforces the message. Both panels use standard shapes and colours.

The warning sign contains the main message. From a perspective at the vanishing point, it shows a pedestrian crossing a railway track in front of a stationary train, while a second train is approaching. Having the perspective at the vanishing point draws together the components used to compose the message, and gives the sign depth. To illustrate the event (the movement of the second train), an arrow in a contrasting colour is shown between the rails, crossing the path being taken by the pedestrian. The profile of the train in the foreground is intentionally not filled in, because it could be either the front or the rear of the train. This also gives more prominence to the approaching train.

ATTENTION !

Figure 3: Panel 1

The lower panel, also of standard shape and size, reinforces the message. It bears the word "**ATTENTION**", which is understandable in both English and French. Here the intent is not to scare users but to get their attention.

The second proposal (Figure 4), which is larger than the first, uses a panel 1,500 mm x 900 mm (oversize). It includes all elements in the sign described above. Here, on a white background, the warning sign is placed on the right. This time, the red arrow indicating the movement of the train stretches beyond the border of the sign to make the danger very clear. The lettering, which here is more explicit, conveys the warning in both official languages. This sign is mounted on two poles.

Figure 4: Panel 2

4.2 Manufacture

The chosen warning sign should be manufactured using reflective sheeting and screen printing. A sign made with reflective sheeting will reflect the ambient light and be more visible at night.

It is recommended that the warning signs be made in the dimensions indicated in Table 1. These dimensions give adequate visibility at a reasonable distance for understanding the message.

4.2 Manufacture (continued)

Table 1: Sign dimensions

Sign type	Dimensions
Warning sign:	
Diamond-shaped sign	600 mm x 600 mm
Panel bearing the message "Attention!"	600 mm x 300 mm
Billboard-type sign	1.500 mm x 900 mm

4.3 Installation

The warning sign must be placed where it will be highly visible to pedestrians. If it is located too far from the railway crossing, users will forget its message.

There are also standards for installing signs beside a road or sidewalk that must be complied with. These standards state that there must be a vertical clearance of 2.2 m between the ground and the bottom of the sign, and a horizontal clearance of 0.3 m between the side of the sign and the road or sidewalk (see Appendix B).

Appendix A shows the recommended installation and location for the warning sign. Of course, the standards for clearance with the railway track must be respected. These standards are governed by the managers of the railways (such as Canadian National and Canadian Pacific) and vary from company to company.

5.1 Sign selected

The first of the two sign models presented was chosen for testing with the public. It is more compact in both size and message, and it would fit better into the desired context without creating a significant visual barrier.

5.2 Analysis site

Working with Transport Canada officials, we studied a number of sites for a survey to measure the perception of the sign by users and passers-by. The two sites chosen were the Montreal West Station for its multi-ethnic clientele and large number of users, and the site on Montée Robert in Saint-Basile-le-Grand for the large number of passers-by.

5.2.1 Montreal West Station

Montreal West Station is located near Concordia University, two public schools, a park and a bicycle path. The station is also in a residential area, so there is a great deal of pedestrian traffic along the track. Currently there are police on duty each school-day morning to provide safety at the Elmhurst Street railway crossing. Figure 5 is a map of the district.

Figure 5: Montreal West Station district

5.2 Analysis (continued)

5.2.2 Saint-Basile-le-Grand

The Saint-Basile-le-Grand site is located where the track crosses Montée Robert. Trains do not stop at this point, and they are moving at high speed. Many pedestrians cross the track here, and the bicycle path on the south side of the track is in frequent use. Figure 6 is a map of the district showing the location of the site selected.

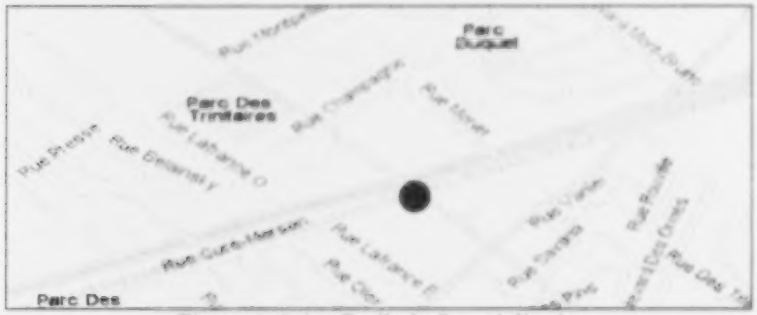


Figure 6: Saint-Basile-le-Grand district

5.3 Location

Once the sites had been chosen, the test signs were placed. Two test signs were installed at each site, facing the direction of pedestrian traffic.

5.3.1 Montreal West Station

The placement of the test signs was decided on with the help of Canadian Pacific, which manages the track at this location. At Montreal West Station there is a problem with space and visibility for the signs. There are very many visual elements at the site (trees, signs, street furniture, etc.). Also, fibre-optic cables are buried along the track, so signs cannot be installed at that location. It was agreed with the Canadian Pacific officials to install the signs on the poles for the flashing level crossing lights. Figure 7 shows the location of a test sign at the site.

Figure 7: Montreal West site

5.3 Location (continued)

Figure 8: Saint-Basile-le-Grand site

5.3.2 Saint-Basile-le-Grand

Compared to the Montreal West Station site, there were fewer restrictions on installing the test signs at the Saint-Basile-le-Grand site. The space near the track is quite open (no visual obstacles) compared to Montreal West Station. We had to meet the clearance requirements of Canadian National (which manages the track at this location) because of underground conduits at the site. We therefore installed one of the signs on an existing pole and the other on a new pole, as shown in Figure 8.

6.1 Objectives

The main objective of this study was to **measure comprehension** of the sign by pedestrians walking near commuter train tracks.

The secondary objectives were to:

- Measure the notice taken of the sign;
- Compare the comprehension rate for the sign assessed with the demographic profile.

6.2 Methodology

The population studied consisted of pedestrians at Montreal West Station and at the intersection of Montée Robert and Laurier Boulevard in Saint-Basile-le-Grand at times when commuter trains were running (Table 2).

Table 2: Location, date and language

Interview location	*n = 506*
Montreal West Station	80%
Saint-Basile-le-Grand	20%
Interview date	*n = 506*
June 3, 2003	19%
June 4, 2003	21%
June 5, 2003	20%
June 6, 2003	20%
June 9, 2003	20%
Interview language	*n = 506*
French	37%
English	63%

Preliminary comments on the results

Significant differences among the sub-groups are mentioned in the text.

The respondent base is indicated for each table or figure.

When a sub-group contains fewer than 30 respondents, the data must be interpreted with caution. In those cases the margin of error is very high, and interpretation must be limited to identifying the major trends (directional results).

The questionnaire (given in Appendix C) was designed by Ad Hoc Research in co-operation with those in charge of the project in Transport Canada, at Gauthier Dubois Girard, architects and CIMA+.

The data were collected on June 3, 4, 5, 6 and 9, 2003, opposite the Montreal West Station (from 7:00 to 10:30 am and from 3:00 to 6:30 pm), and at the intersection of Montée Robert and Laurier Boulevard in Saint-Basile-le-Grand (from 7:00 to 8:00 am and from 5:00 to 7:00 pm).

A warning sign was installed at each of the two data collection sites one week before the interviews began.

The data were collected in 506 interviews – 407 at Montreal West Station and 99 at Saint-Basile-le-Grand.

The interviews lasted an average of about three minutes. Although we do not know the exact response rate, approximately half the people refused to respond to the survey when approached by the interviewers.

The precision of the study results is measured by the sampling error. It depends on two factors: the size of the sample collected and the proportion obtained on each question.

The maximum margin of error associated with a sample of this size (n=506) is ± 4.36% with a 95% confidence level.

6.2 Methodology (continued)

Table 3 illustrates the margin of error for various proportions at a 95% confidence level.

Table 3: Margin of error for various proportions

	Proportion					
	5%, 95%	10%, 90%	20%, 80%	30%, 70%	40%, 60%	50%
Margin of error	± 1.9%	± 2.61%	± 3.49%	± 3.99%	± 4.27%	± 4.36%

The detailed study results are given in the form of statistical tables in Appendix D. The following variables were used for the crossings: interview location, gender, number of visits to the site, age, education and place of birth.

6.3 Results

Table 4: Gender, age and education

Gender of respondent	*n = 498*
Female	52%
Male	48%
Age	*n = 501*
Under age 18	29%
18 to 24	13%
25 to 34	16%
35 to 44	18%
45 to 54	14%
55 to 64	7%
65 and over	4%
Level of education	*n = 496*
Elementary or less	20%
High school	23%
College/trade school/CEGEP	19%
University	38%

6.3.1 Profile of respondents

The respondents were almost equally divided by gender (women: 52% and men: 48%). Also, the respondents we met were fairly young. Nearly a third (29%) were under age 18, and the same proportion (29%) were aged 18 to 34 (18 to 24: 13%, and 25 to 34: 16%).

The level of education was fairly high. Nearly four respondents out of ten (38%) had completed university studies, and just under one in five (19%) had taken college courses (Table 4).

6.3 Results (continued)

Table 5: Place of birth and number of visits

Born in Canada	*n = 499*
Yes	86%
No	14%
Place of birth	*n = 71*
Western Europe	35%
United States	13%
Asia	10%
Caribbean	9%
Eastern Europe	9%
Northern Africa	6%
India	6%
Vietnam	4%
Africa	4%
Other	6%
Number of visits to the station or intersection in the past week	*n = 498*
First time	6%
2 or 3 times	6%
4 or 5 times	15%
6 to 10 times	42%
More than 10 times	32%

Most (86%) were born in Canada. Of the respondents not born in Canada, over a third (35%) came from Western Europe, just under one in six (13%) came from the United States, and one in ten (10%) were from Asia.

Finally, most of the respondents (74%) go quite regularly to the station or intersection where they were interviewed (6 to 10 times a week: 42%; and more than 10 times a week: 32% (Table 5).

QA1 Have you seen this sign before?

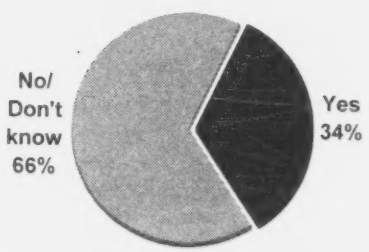


Figure 9: Have you seen this sign before?

Base: All respondents

6.3.2 Notice taken of sign

Even though nearly three quarters of the respondents (74%) had gone more than five times to the station or intersection where the sign was installed, awareness of the sign was not very high.

Most of the persons questioned (66%) had never noticed the sign, but just over a third (34%) said they had already seen it (Figure 9). The reason for this relatively low recall rate may be related to the sign itself or to its location.

As mentioned in section 6.2, the signs were installed at each site one week before data collection began.

Most of the respondents (86%) who had noticed the sign were able to name a site where they thought they had seen it.

6.3 Results (continued)

QA2 Where did you see it?*

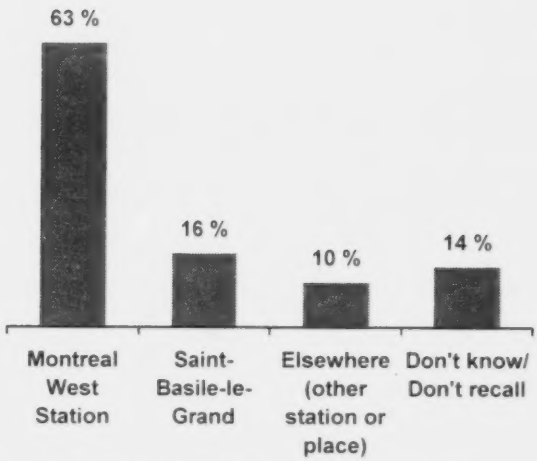


Figure 10: Place where the sign was seen

* More than one answer could be given to this question.
Base: Respondents who had already seen the sign

Most of these people (63%) said they had seen the sign at Montreal West Station. More specifically, this last proportion is 77% for the respondents who were interviewed at the station.

Approximately one person in six (16%) saw the sign at Saint-Basile-le-Grand. This proportion is 87% for respondents who were interviewed at Saint-Basile-le-Grand.

Finally, nearly a quarter of the respondents who had already seen the sign (24%) said that they had seen it somewhere other than at these two sites (10%) or did not know where they had seen it (14%) (Figure 10).

6.3.3 Understanding of sign

The understanding of the sign was fairly good (Figure 11).

Over seven respondents out of ten (71) spontaneously understood its meaning.

Most of those who did not understand the sign took it to be a prohibition against crossing the tracks:

- Crossing the tracks is prohibited (14%);
- One cannot/must not cross when the train is coming (4%).

6.3 Results (continued)

QA3 In your opinion, what is the meaning of this sign?

Base: All respondents

However, there was no statistically significant difference between the sub-groups considered.

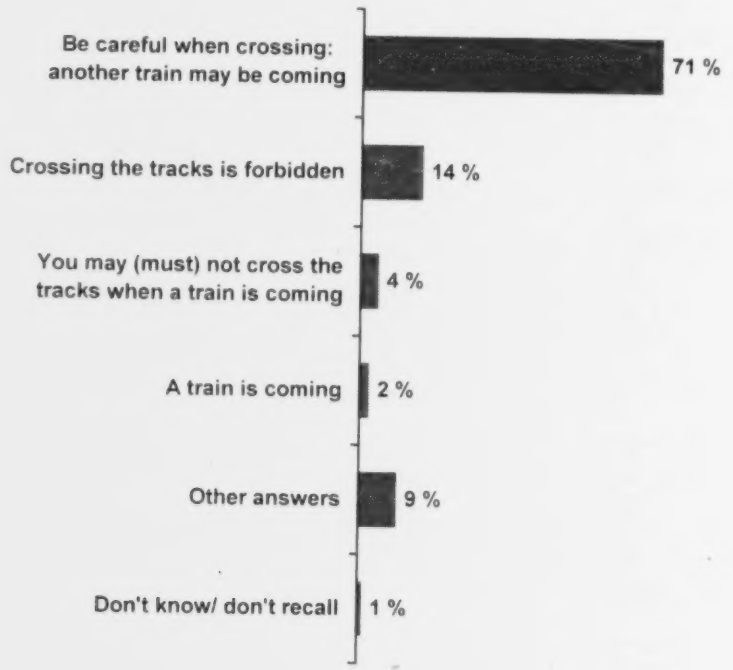

Be careful when crossing: another train may be coming
71 %
Crossing the tracks is forbidden
14 %
You may (must) not cross the tracks when a train is coming
4 %
A train is coming
2 %
Other answers
9 %
Don't know/ don't recall
1 %

Figure 11: Meaning of sign

Among respondents who thought that the sign meant that crossing the tracks is forbidden, the visual aspects that led to this conclusion were varied (Figure 12).

The most frequently mentioned aspect was the arrow, or the red arrow (42%). The contrasting colour, red, which is generally associated with prohibition, highlights the arrow symbol, probably leading the respondents to associate it with a prohibition against crossing the tracks. Also, nearly one respondent in six (14%) directly associated the colour red with a prohibition message.

Another aspect mentioned by nearly a third (32%) of respondents: the train. The fact that the two trains take up most of the available space on the sign may have led the participants to associate the train with a prohibition against crossing the tracks.

6.3 Results (continued)

QA4 What aspect(s) of the sign make you think that? *

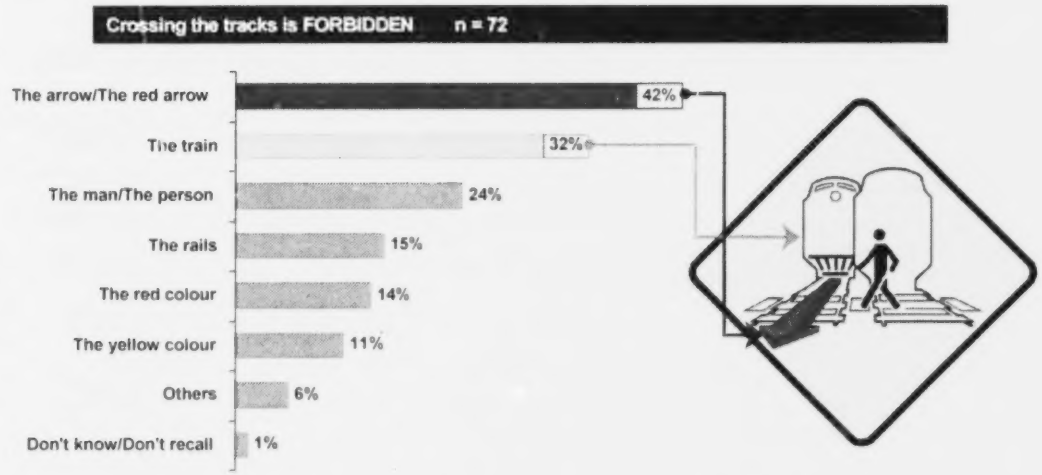


Figure 12: Aspects of the sign that led to interpretation (respondents for whom the sign meant "Crossing the tracks is forbidden")

Base: Respondents for whom the sign means "crossing the tracks is forbidden"
* More than one answer could be given for this question.

Also, for respondents who thought that the sign meant that they must not or should not cross the tracks when a train is coming, the same visual elements were mentioned to explain this answer (Figure 13).

In this case, the elements most often mentioned were the train (11 out of 20) and the person crossing (11). These visual elements were mentioned in the respondents' answers. The red arrow was also mentioned by half the respondents (10 out of 20). Again, the colour red was associated with the idea of a prohibition.

Finally, there was no statistically significant difference between the sub-groups surveyed.

6.3 Results (continued)

QA4 What aspect(s) of the sign make you think that?*

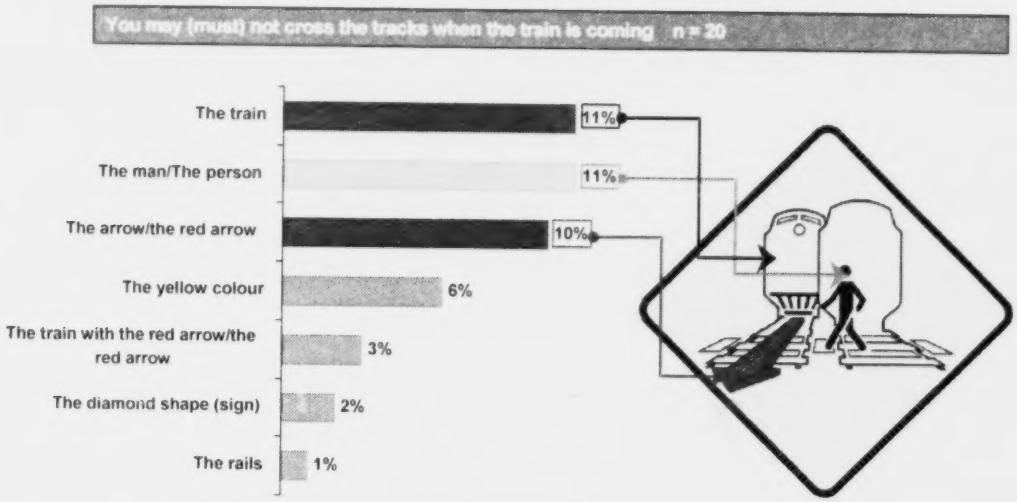


Figure 13: Aspects of the sign that led to interpretation (respondents for whom the sign meant "You may (must) not cross the tracks when a train is coming")

Base: Respondents for whom the sign meant "You may (must) not cross the tracks when a train is coming"
* More than one answer could be given to this question

7.0 Conclusion

In conclusion, here are the answers to the main questions raised erecting this sign.

Was the sign seen and noticed by the respondents?

Only a minority (34%) remembered having seen the sign before the interview. There are two possible reasons for this low recall rate: the signs may have been installed where they were not very visible; or they may not have drawn people's attention.

Was the meaning of the sign clearly understood?

Overall, the comprehension of the sign was good. Over seven people out of ten (71%) understood its exact meaning. Most of the other respondents guessed that it was dangerous to cross the tracks, and that is well in line with the initial objectives. It should be noted that there was no difference in comprehension among people of different ages, education levels or origins; this suggests that the sign has universal significance. We therefore believe that this sign is well enough understood to be used in its present form. Nevertheless, to reinforce the message, we recommend that the second train be shown in black to create a focal point for the danger being illustrated.

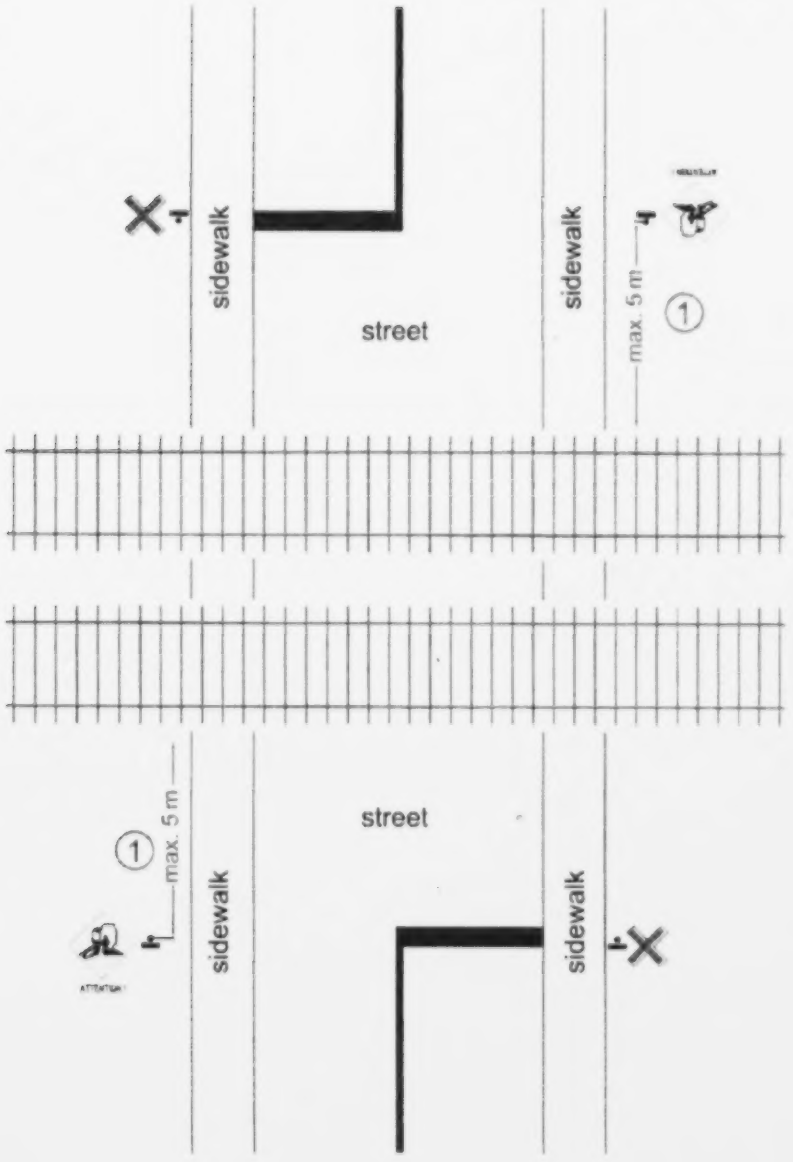
Recommendation

Since only a minority of respondents noticed the sign, but most understood the essence of its message, it would be beneficial for Transport Canada to install the signs at places where they will be more visible, and to support an ongoing campaign to install these signs.

Appendix A

Location

LOCATION



Note: (1) Track clearance standards, which vary according to the company managing the railway, must be adhered to.

TRANSPORT CANADA – SIGN STUDY – SECOND TRAIN

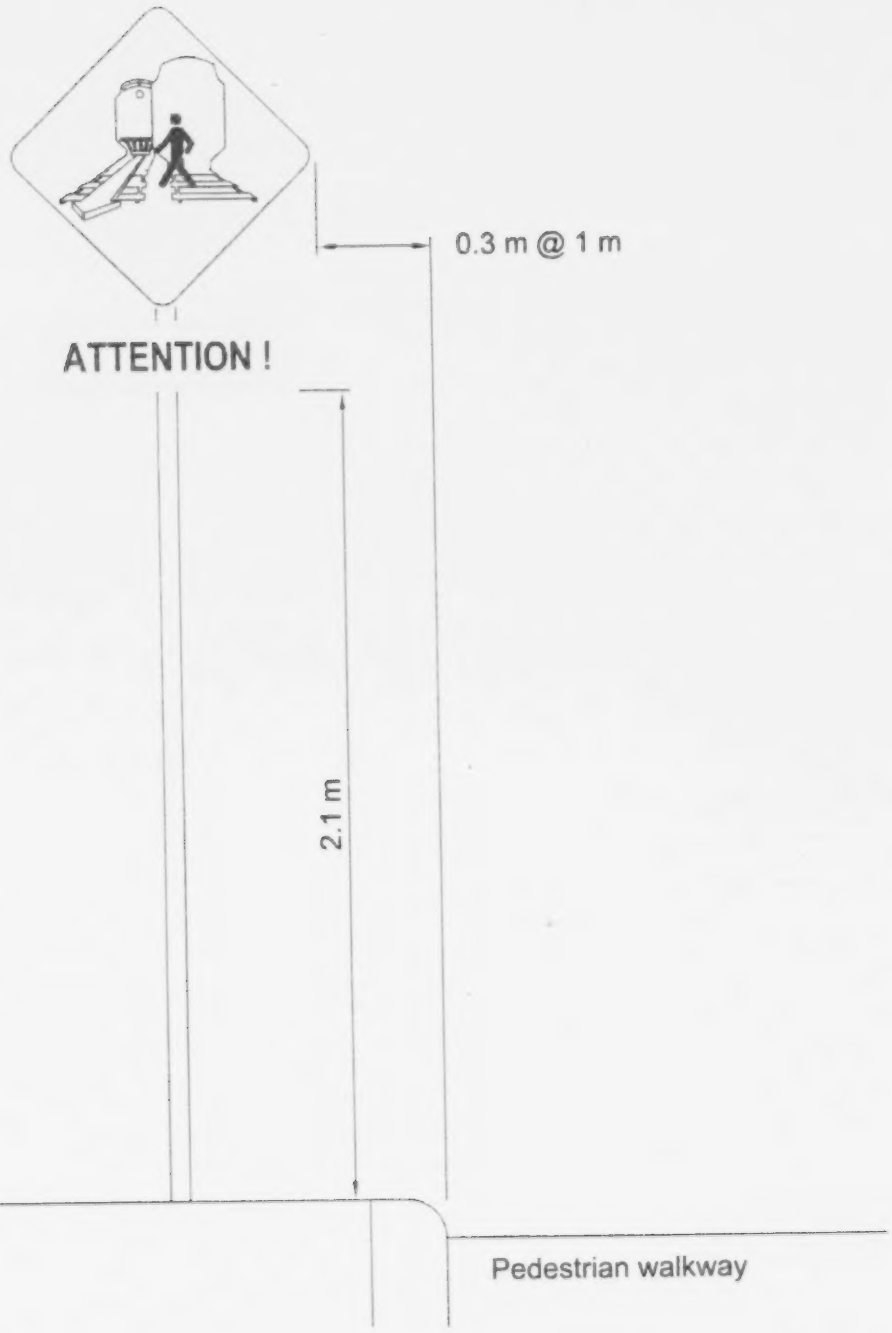
SCALE NONE

4 JULY 2003

1450 CITY COUNCILLORS
SUITE 800
MONTREAL QUEBEC H3A 2E6
TEL (514) 849-0430 FAX (514) 849-8049

Appendix B

Installation Criteria



INSTALLATION CRITERIA

TRANSPORT CANADA – SIGN STUDY – SECOND TRAIN

SCALE NONE

16 APRIL 2003

1450, CITY COUNCILLORS
SUITE 800
MONTREAL, QUEBEC H3A 2E6
TEL. (514) 849-0430 FAX (514) 849-8049

Appendix C

Questionnaire

Ad hoc research
1250 Guy St., 9th floor
Montreal, Quebec
Tel.: (514) 937-4040

May 23, 2003
FINAL VERSION

EVALUATION OF A *TRANSPORT CANADA* ROAD SIGN (TT01)

ONE-ON-ONE QUESTIONNAIRE

Hello/good evening, my name is _____ from Ad Hoc Research. *We are currently evaluating a road sign for* Transport Canada. *Could I ask you a few short questions?*

(SELECT A PERSON WHO CAN EXPRESS THEMSELVES WELL IN ENGLISH. USE THIS QUESTIONNAIRE IF THE PERSON SPEAKS ENGLISH AND THE FRENCH QUESTIONNAIRE IF THE PERSON SPEAKS FRENCH.)

A. **Indicate where the interview took place:**

- ❑ 1 Montreal West train station
- ❑ 2 Saint-Basile-le-Grand

B. **Indicate the date of the interview:**

❑ June 3 ❑ June 4 ❑ June 5 ❑ June 6 ❑ June 7 ❑ June 8 ❑ June 9

C. **Indicate the time of the interview:**

_____ : _____

SECTION A – AWARENESS AND UNDERSTANDING OF THE SIGN

(SHOW RESPONDENT SIGN BEING TESTED)

QA1 Have you seen this sign before?

- ❑ 1 Yes → **Continue**
- ❑ 2 No → **Go to QA3**
- ❑ 9 DNK → **Go to QA3**

QA2 Where did you see it? **(DO NOT READ – SEVERAL ANSWERS POSSIBLE)**

- ❑ 1 Montreal West train station
- ❑ 2 Saint-Basile-le-Grand
- ❑ 3 Elsewhere (other station or place)
- ❑ 9 DNK

QA3 In your opinion, what is the meaning of this sign? **(DO NOT READ)**

- ❑ 001 Caution must be used when crossing the train tracks because another train may be approaching → **GO TO QB1**
- ❑ 002 Crossing the tracks is **forbidden**
- ❑ 003 Crossing the tracks is **permitted**
- ❑ 004 That is where passengers get off the train
- ❑ 996 Other (specify): _____

_____

_____

❑ 999 **DNK→ GO TO QB1**

QA4 What aspect(s) of the sign make you think that? **(DO NOT READ)**

❑ 996 Other (specify) _____

_____

_____

SECTION B – RESPONDENT PROFILE

QB1 How many times have you come to this station/intersection within the past week? **(READ)**

❑ 1 This is the first time
❑ 2 2 or 3 times
❑ 3 4 or 5 times
❑ 4 6 to 10 times
❑ 5 More than 10 times
❑ 9 DNK

QB2 To which age category do you belong? **(READ)**

❑ 1 Under 18
❑ 2 18 to 24
❑ 3 25 to 34
❑ 4 35 to 44
❑ 5 45 to 54
❑ 6 55 to 64
❑ 7 65 and over
❑ 9 DNK

QB3 What is the highest level of schooling that you completed? **(READ)**

❑ 1 Elementary or less
❑ 2 High school
❑ 3 College/trade school/Cegep
❑ 4 University
❑ 9 DNK

QB4 Were you born in Canada?

❑ 1 Yes → **Go to conclusion**
❑ 2 No → **Continue**
❑ 9 DNA → **Go to conclusion**

QB5 Where were you born?

❑ 001 United States
❑ 004 France
❑ 034 Hong Kong
❑ 035 Tunisia
❑ 036 China
❑ 041 Turkey
❑ 042 Egypt
❑ 044 Japan
❑ 047 Morocco
❑ 049 India
❑ 053 Algeria
❑ 060 Haiti
❑ 065 Vietnam
❑ 092 Taiwan
❑ 095 Great Britain
❑ 996 Other (specify) _____
❑ 999 DNA

(REGISTER GENDER)

QB6

❑ 1 Female
❑ 2 Male

It's now over !
***On behalf of* Ad Hoc Research *and* Transport Canada,**
I thank you very much for your cooperation !

Appendix D

Detailed statistical tables

			Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
		Total	Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
Interview location	Montreal West Station	407	407		208	191	103	168	130	178	128	98	166	68	163	333	70
		80.4%	100.0%		80.6%	79.6%	78.6%	80.0%	82.8%	84.4%	76.6%	78.0%	78.3%	72.3%	85.8%	78.0%	97.2%
	Saint-Basile-le-Grand	99		99	50	49	28	42	27	33	39	27	46	26	27	94	2
		19.6%		100.0%	19.4%	20.4%	21.4%	20.0%	17.2%	15.6%	23.4%	22.0%	21.7%	27.7%	14.2%	22.0%	2.8%
Total		506	407	99	258	240	131	210	157	211	167	123	212	94	190	427	72
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

			Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
		Total	Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
Interview date	June 3	95	77	18	49	45	35	35	23	33	32	26	37	24	30	83	11
		18.8%	18.9%	18.2%	19.0%	18.8%	26.7%	16.7%	14.6%	15.6%	19.2%	21.1%	17.5%	25.5%	15.8%	19.4%	15.3%
	June 4	105	86	19	52	51	25	48	31	48	38	19	53	20	31	86	16
		20.8%	21.1%	19.2%	20.2%	21.3%	19.1%	22.9%	19.7%	22.7%	22.8%	15.4%	25.0%	21.3%	16.3%	20.1%	22.2%
	June 5	102	81	21	50	50	26	37	37	40	33	29	40	16	44	86	15
		20.2%	19.9%	21.2%	19.4%	20.8%	19.8%	17.6%	23.6%	19.0%	19.8%	23.6%	18.9%	17.0%	23.2%	20.1%	20.8%
	June 6	102	82	20	54	46	25	43	34	40	33	29	37	17	46	87	15
		20.2%	20.1%	20.2%	20.9%	19.2%	19.1%	20.5%	21.7%	19.0%	19.8%	23.6%	17.5%	18.1%	24.2%	20.4%	20.8%
	June 9	102	81	21	53	48	20	47	32	50	31	20	45	17	39	85	15
		20.2%	19.9%	21.2%	20.5%	20.0%	15.3%	22.4%	20.4%	23.7%	18.6%	16.3%	21.2%	18.1%	20.5%	19.9%	20.8%
Total		506	407	99	258	240	131	210	157	211	167	123	212	94	190	427	72
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

			Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
		Total	Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
Interview time (hour)	3 pm	46	46		23	22	3	16	25	43	1	2	39	4	3	40	5
		9.1%	11.3%		8.9%	9.2%	2.3%	7.6%	15.9%	20.4%	6%	1.6%	18.4%	4.3%	1.6%	9.4%	6.9%
	4 pm	62	62		32	29	10	31	20	40	9	13	45	5	12	51	11
		12.3%	15.2%		12.4%	12.1%	7.6%	14.8%	12.7%	19.0%	5.4%	10.6%	21.2%	5.3%	6.3%	11.9%	15.3%
	5 pm	63	63		30	31	14	29	19	41	11	9	35	7	16	57	4
		12.5%	15.5%		11.6%	12.9%	10.7%	13.8%	12.1%	19.4%	6.6%	7.3%	16.5%	7.4%	8.4%	13.3%	5.6%
	6 pm	33	33		14	19	10	10	13	19	7	7	21	4	7	29	4
		6.5%	8.1%		5.4%	7.9%	7.6%	4.8%	8.3%	9.0%	4.2%	5.7%	9.9%	4.3%	3.7%	6.8%	5.6%
	7 h/am	92	66	26	51	40	26	46	20	20	44	28	17	23	51	75	16
		18.2%	16.2%	26.3%	19.8%	16.7%	19.8%	21.9%	12.7%	9.5%	26.3%	22.8%	8.0%	24.5%	26.8%	17.6%	22.2%
	8 h/am	106	85	21	50	55	36	37	33	20	51	34	21	25	58	86	19
		20.9%	20.9%	21.2%	19.4%	22.9%	27.5%	17.6%	21.0%	9.5%	30.5%	27.6%	9.9%	26.6%	30.5%	20.1%	26.4%
	9 h/am	51	50	1	29	20	12	22	15	12	22	16	6	13	31	40	11
		10.1%	12.3%	1.0%	11.2%	8.3%	9.2%	10.5%	9.6%	5.7%	13.2%	13.0%	2.8%	13.8%	16.3%	9.4%	15.3%
	16 h	13	1	12	8	5	5	4	2	5	6	2	9	1	3	13	
		2.6%	2%	12.1%	3.1%	2.1%	3.8%	1.9%	1.3%	2.4%	3.6%	1.6%	4.2%	1.1%	1.6%	3.0%	
	17 h	26		26	13	13	9	9	8	7	10	9	13	8	5	24	1
		5.1%		26.3%	5.0%	5.4%	6.9%	4.3%	5.1%	3.3%	6.0%	7.3%	6.1%	8.5%	2.6%	5.6%	1.4%
	18 h	13		13	7	6	5	6	2	4	6	3	5	4	4	11	1
		2.6%		13.1%	2.7%	2.5%	3.8%	2.9%	1.3%	1.9%	3.6%	2.4%	2.4%	4.3%	2.1%	2.6%	1.4%
	99	1	1		1		1						1			1	
		2%	2%		4%		8%						5%			2%	
Total		506	407	99	258	240	131	210	157	211	167	123	212	94	190	427	72
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

			Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
		Total	Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
Interview time (minutes)	0	231	221	10	123	106	58	46	125	101	79	49	100	37	88	198	29
		45.7%	54.3%	10.1%	47.7%	44.2%	44.3%	21.9%	79.6%	47.9%	47.3%	39.8%	47.2%	39.4%	46.3%	46.4%	40.3%
	5	25	19	7	15	8	4	17	3	13	8	3	8	5	10	24	1
		4.9%	4.4%	7.1%	5.8%	3.3%	3.1%	8.1%	1.9%	6.2%	4.8%	2.4%	3.8%	5.3%	5.3%	5.6%	1.4%
	10	20	13	7	10	9	2	15	3	8	9	3	9	5	5	18	2
		4.0%	3.2%	7.1%	3.9%	3.8%	1.5%	7.1%	1.9%	3.8%	5.4%	2.4%	4.2%	5.3%	2.6%	4.2%	2.8%
	15	31	20	11	14	17	12	17	2	12	8	11	13	7	11	27	4
		6.1%	4.9%	11.1%	5.4%	7.1%	9.2%	8.1%	1.3%	5.7%	4.8%	8.9%	6.1%	7.4%	5.8%	6.3%	5.6%
	20	24	17	7	13	11	7	16	1	8	9	7	7	6	11	15	9
		4.7%	4.2%	7.1%	5.0%	4.6%	5.3%	7.6%	.6%	3.8%	5.4%	5.7%	3.3%	6.4%	5.8%	3.5%	12.5%
	25	24	16	8	12	11	9	12	3	8	8	8	8	8	8	19	5
		4.7%	3.9%	8.1%	4.7%	4.6%	6.9%	5.7%	1.9%	3.8%	4.8%	6.5%	3.8%	8.5%	4.2%	4.4%	6.9%
	30	28	17	11	11	17	8	13	7	10	10	8	12	3	13	25	3
		5.5%	4.2%	11.1%	4.3%	7.1%	6.1%	6.2%	4.5%	4.7%	6.0%	6.5%	5.7%	3.2%	6.8%	5.9%	4.2%
	35	24	20	4	12	11	6	15	2	9	7	8	9	6	9	21	3
		4.7%	4.9%	4.0%	4.7%	4.6%	4.6%	7.1%	1.3%	4.3%	4.2%	6.5%	4.2%	6.4%	4.7%	4.9%	4.2%
	40	21	11	10	12	8	5	9	4	7	8	6	10	4	7	17	3
		4.2%	2.7%	10.1%	4.7%	3.3%	3.8%	4.3%	2.5%	3.3%	4.8%	4.9%	4.7%	4.3%	3.7%	4.0%	4.2%
	45	23	14	9	9	14	4	16	3	13	4	6	13	5	5	20	3
		4.5%	3.4%	9.1%	3.5%	5.8%	3.1%	7.6%	1.9%	6.2%	2.4%	4.9%	6.1%	5.3%	2.6%	4.7%	4.2%
	50	24	18	6	11	13	10	12	1	9	7	8	9	3	12	15	9
		4.7%	4.4%	6.1%	4.3%	5.4%	7.6%	5.7%	.6%	4.3%	4.2%	6.5%	4.2%	3.2%	6.3%	3.5%	12.5%
	55	30	21	9	15	15	5	22	3	13	10	6	13	5	11	27	1
		5.9%	5.2%	9.1%	5.8%	6.3%	3.8%	10.5%	1.9%	6.2%	6.0%	4.9%	6.1%	5.3%	5.8%	6.3%	1.4%
	99	1	1		1		1						1			1	
		.2%	.2%		.4%		.8%						.5%			.2%	
Total		506	407	99	258	240	131	210	157	211	167	123	212	94	190	427	72
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

			Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
		Total	Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
QA1) Have seen the sign before	Yes	171	140	31	87	84	40	69	60	75	63	32	73	24	73	145	25
		33.8%	34.4%	31.3%	33.7%	35.0%	30.5%	32.9%	38.2%	35.5%	37.7%	26.0%	34.4%	25.5%	38.4%	34.0%	34.7%
	No	330	262	68	168	154	89	138	97	136	103	87	139	69	113	279	45
		65.2%	64.4%	68.7%	65.1%	64.2%	67.9%	65.7%	61.8%	64.5%	61.7%	70.7%	65.6%	73.4%	59.5%	65.3%	62.5%
	DNK/DNR	5	5		3	2	2	3			1	4		1	4	3	2
		1.0%	1.2%		1.2%	.8%	1.5%	1.4%			.6%	3.3%		1.1%	2.1%	.7%	2.8%
Total		506	407	99	258	240	131	210	157	211	167	123	212	94	190	427	72
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

			Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
		Total	Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
QA2) Place where sign was seen (first mention)	Montreal West Station	108	108		56	52	25	39	43	51	37	19	49	13	45	88	19
		63.2%	77.1%		64.4%	61.9%	62.5%	86.5%	71.7%	68.0%	58.7%	59.4%	67.1%	54.2%	61.6%	60.7%	76.0%
	Saint-Basile-le-Grand	28	1	27	15	13	5	17	6	13	11	4	13	6	9	28	
		16.4%	7%	87.1%	17.2%	15.5%	12.5%	24.6%	10.0%	17.3%	17.5%	12.5%	17.8%	25.0%	12.3%	19.3%	
	DNK/DNR	23	19	4	12	11	7	7	8	6	12	5	7	4	12	19	4
		13.5%	13.6%	12.9%	13.8%	13.1%	17.5%	10.1%	13.3%	8.0%	19.0%	15.6%	9.6%	16.7%	16.4%	13.1%	16.0%
	Elsewhere (other station or place)	12	12		4	8	3	6	3	5	3	4	4	1	7	10	2
		7.0%	8.6%		4.6%	9.5%	7.5%	8.7%	5.0%	6.7%	4.8%	12.5%	5.5%	4.2%	9.6%	6.9%	8.0%
Total		171	140	31	87	84	40	69	60	75	63	32	73	24	73	145	25
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

			Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
		Total	Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
QA2) Place where sign was seen (all mentions)	Montreal West Station	108	108		56	52	25	39	43	51	37	19	49	13	45	88	19
		63.2%	77.1%		64.4%	61.9%	62.5%	86.5%	71.7%	68.0%	58.7%	59.4%	67.1%	54.2%	61.6%	60.7%	76.0%
	Saint-Basile-le-Grand	28	1	27	15	13	5	17	6	13	11	4	13	6	9	28	
		16.4%	7%	87.1%	17.2%	15.5%	12.5%	24.6%	10.0%	17.3%	17.5%	12.5%	17.8%	25.0%	12.3%	19.3%	
	DNK/DNR	23	19	4	12	11	7	7	8	6	12	5	7	4	12	19	4
		13.5%	13.6%	12.9%	13.8%	13.1%	17.5%	10.1%	13.3%	8.0%	19.0%	15.6%	9.6%	16.7%	16.4%	13.1%	16.0%
	Elsewhere (other station or place)	17	17		6	11	3	8	6	8	5	4	6	2	9	15	2
		9.9%	12.1%		6.9%	13.1%	7.5%	11.6%	10.0%	10.7%	7.9%	12.5%	8.2%	8.3%	12.3%	10.3%	8.0%
Total		171	140	31	87	84	40	69	60	75	63	32	73	24	73	145	25
		102.9%	103.6%	100.0%	102.3%	103.6%	100.0%	102.9%	105.0%	104.0%	103.2%	100.0%	102.7%	104.2%	102.7%	103.4%	100.0%

			Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
		Total	Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
QA3) What sign means (first mention)	Be careful when crossing, another train may be crossing	357	288	69	185	167	92	145	116	150	115	90	143	67	142	298	54
		70.6%	70.8%	69.7%	71.7%	69.6%	70.2%	69.0%	73.9%	71.1%	68.9%	73.2%	67.5%	71.3%	74.7%	69.8%	75.0%
	Crossing the tracks is forbidden	72	69	4	40	31	16	29	27	34	19	16	34	10	24	64	7
		14.2%	16.7%	4.0%	15.5%	12.9%	12.2%	13.3%	17.2%	16.1%	11.4%	13.0%	16.0%	10.6%	12.6%	15.0%	9.7%
	You may (must) not cross the tracks when a train is coming	21	8	13	12	9	7	11	3	5	11	5	10	4	7	17	3
		4.2%	2.0%	13.1%	4.7%	3.8%	5.3%	5.2%	1.9%	2.4%	6.6%	4.1%	4.7%	4.3%	3.7%	4.0%	4.2%
	A train is coming	11	10	1	6	5	2	5	3	2	7	2	4	4	3	11	
		2.2%	2.5%	1.0%	2.3%	2.1%	1.5%	2.4%	1.9%	9%	4.2%	1.6%	1.9%	4.3%	1.6%	2.6%	
	DNK/DNR	5	5		1	4	2	2	1	4		1	4	1		4	1
		1.0%	1.2%		4%	1.7%	1.5%	1.0%	6%	1.9%		6%	1.9%	1.1%		9%	1.4%
	It is dangerous to cross/pass	4	4		1	2		3	1		3	1			4	2	2
		8%	1.0%		4%	8%		1.4%	6%		1.8%	6%			2.1%	5%	2.8%
	Crossing the tracks is permitted	3	2	1	1	2	1	1		1	1	1	2	1		3	
		6%	5%	1.0%	4%	8%	8%	5%		5%	6%	8%	9%	1.1%		7%	
	Two trains are coming	3	3		1	2	1	2		1	1	1	1		1	1	2
		6%	7%		4%	8%	8%	1.0%		5%	6%	6%	5%		5%	2%	2.8%
	Two trains could come at the same time	3	1	2	2	1		2		1	2		1		2	3	
		6%	2%	2.0%	8%	4%		1.0%		5%	1.2%		5%		1.1%	7%	
	People get off the train here	2	1	1	2			1	1	1	1		2			2	
		4%	2%	1.0%	8%			5%	6%	5%	6%		9%			5%	
	Do not cross in front of the train	2	2		2			2		1		1	1	1		1	1
		4%	5%		8%			1.0%		5%		6%	5%	1.1%		2%	1.4%
	You must not cross when the gates are down	1	1			1	1			1					1	1	
		2%	2%			4%	8%			5%					5%	2%	
	Be careful	1	1			1	1				1				1	1	
		2%	2%			4%	8%				6%				5%	2%	
	The train stop is dangerous	1	1			1	1				1				1		1
		2%	2%			4%	8%				6%				5%		1.4%
	You can cross, but only when there are cars	1	1			1		1			1		1			1	
		2%	2%			4%		5%			6%		5%			2%	
	Cross when the train is coming	1	1		1				1	1			1			1	
		2%	2%		4%				6%	5%			5%			2%	
	Do not go in front of the train	1	1			1			1	1			1			1	
		2%	2%			4%			6%	5%			5%			2%	
	Another train is crossing	1	1			1			1	1			1			1	
		2%	2%			4%			6%	5%			5%			2%	
	You can't cross when another train is coming	1		1	1		1				1				1	1	
		2%		1.0%	4%		8%				6%				5%	2%	
	Attention: do not cross the tracks when the train is coming	1		1	1			1				1		1		1	
		2%		1.0%	4%			5%				8%		1.1%		2%	
	That there are train tracks	1		1		1	1			1				1		1	
		2%		1.0%		4%	8%			9%				1.1%		2%	
	You will get hit if you cross when the train comes	1		1		1		1		1			1			1	
		2%		1.0%		4%		5%		5%			5%			2%	
	Wait for the train to pass before crossing	1	1		1		1			1			1			1	
		2%	2%		4%		8%			9%			5%			2%	
	You cannot pass because a train is coming	1	1			1		1		1					1	1	
		2%	2%			4%		5%		5%					5%	2%	
	Do not cross	1		1		1		1				1		1		1	
		2%		1.0%		4%		5%				8%		1.1%		2%	
	Do not cross because a train is coming	1	1		1		1					1	1			1	
		2%	2%		4%		8%					8%	9%			2%	

			Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
		Total	Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	Collegial	University	Yes	No
QA3) What sign means (first mention)	Grade crossing	1	1			1	1				1			1		1	
		2%	2%			4%	8%				5%			1.1%		2%	
	Do not cross after the train has left	1	1			1		1		1			1			1	
		2%	2%			4%		5%		5%			5%			2%	
	Yield right of way to the train	1	1			1	1					1			1	1	
		2%	2%			4%	8%					8%			5%	2%	
	Do not cross when two trains are moving	1	1			1			1	1			1			1	
		2%	2%			4%			6%	5%			5%			2%	
	Be careful not to get hit when crossing the tracks	1		1		1	1				1			1		1	
		2%		1.0%		4%	8%				6%			1.1%		2%	
	There is a hidden train coming	1		1		1		1			1				1	1	
		2%		1.0%		4%		5%			6%				5%	2%	
	People have to be careful if a train comes	1		1		1			1			1	1			1	
		2%		1.0%		4%			6%			8%	5%			2%	
	Go this way	1	1					1		1				1			1
		2%	2%					5%		5%				1.1%			1.4%
Total		506	407	99	258	240	131	210	157	211	167	123	212	94	190	427	72
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

			Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
		Total	Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
QA3) What the sign means (all mentions)	Be careful when crossing another train may be coming	357	288	69	185	167	92	145	116	150	115	90	143	67	142	298	54
		70.6%	70.8%	69.7%	71.7%	69.6%	70.2%	69.0%	73.9%	71.1%	68.9%	73.2%	67.5%	71.3%	74.7%	69.8%	75.0%
	Crossing the tracks is forbidden	72	68	4	40	31	16	28	27	34	19	16	34	10	24	64	7
		14.2%	16.7%	4.0%	15.5%	12.9%	12.2%	13.3%	17.2%	16.1%	11.4%	13.0%	16.0%	10.6%	12.6%	15.0%	9.7%
	You may (must) not cross the tracks when a train is coming	21	8	13	12	9	7	11	3	5	11	5	10	4	7	17	3
		4.2%	2.0%	13.1%	4.7%	3.8%	5.3%	5.2%	1.9%	2.4%	6.6%	4.1%	4.7%	4.3%	3.7%	4.0%	4.2%
	A train is coming	11	10	1	6	5	2	5	3	2	7	2	4	4	3	11	
		2.2%	2.5%	1.0%	2.3%	2.1%	1.5%	2.4%	1.9%	9%	4.2%	1.6%	1.9%	4.3%	1.6%	2.6%	
	DNK/DNR	5	5		1	4	2	2	1	4		1	4	1		4	1
		1.0%	1.2%		4%	1.7%	1.5%	1.0%	6%	1.9%		8%	1.9%	1.1%		9%	1.4%
	It is dangerous to cross/pass	4	4		1	2		3	1		3	1			4	2	2
		8%	1.0%		4%	8%		1.4%	6%		1.8%	8%			2.1%	5%	2.8%
	Crossing the tracks is permitted	3	2	1	1	2	1	1		1	1	1	2	1		3	
		6%	5%	1.0%	4%	8%	8%	5%		5%	6%	8%	9%	1.1%		7%	
	Two trains are coming	3	3		1	2	1	2		1	1	1	1		1	1	2
		6%	7%		4%	8%	8%	1.0%		5%	6%	8%	5%		5%	2%	2.8%
	Two trains could come at the same time	3	1	2	2	1		2		1	2		1		2	3	
		6%	2%	2.0%	8%	4%		1.0%		5%	1.2%		5%		1.1%	7%	
	People get off the train here	2	1	1	2			1	1	1	1		2			2	
		4%	2%	1.0%	8%			5%	6%	5%	6%		9%			5%	
	Do not cross in front of the train	2	2		2			2		1		1	1	1		1	1
		4%	5%		8%			1.0%		5%		8%	5%	1.1%		2%	1.4%
	Do not cross	2	1	1	1	1		1	1		1	1		1	1	2	
		4%	2%	1.0%	4%	4%		5%	6%		6%	8%		1.1%	5%	5%	
	You must not cross when the gates are down	1	1			1	1			1					1	1	
		2%	2%			4%	8%			5%					5%	2%	
	Be careful	1	1			1	1				1				1	1	
		2%	2%			4%	8%				6%				5%	2%	
	The train stop is dangerous	1	1			1	1				1				1		1
		2%	2%			4%	8%				6%				5%		1.4%
	You can cross, but only when there are no cars	1	1			1		1			1		1			1	
		2%	2%			4%		5%			6%		5%			2%	
	Cross when the train is coming	1	1		1				1	1			1			1	
		2%	2%		4%				6%	5%			5%			2%	
	Do not go in front of the train	1	1			1			1	1			1			1	
		2%	2%			4%			6%	5%			5%			2%	
	Another train is coming	1	1			1			1	1			1			1	
		2%	2%			4%			6%	5%			5%			2%	
	You can't cross when another train is coming	1		1	1		1				1				1	1	
		2%		1.0%	4%		8%				6%				5%	2%	
	Attention: do not cross the tracks when the train is coming	1		1	1			1				1		1		1	
		2%		1.0%	4%			5%				8%		1.1%		2%	
	That there are train tracks	1		1		1	1			1				1		1	
		2%		1.0%		4%	8%			5%				1.1%		2%	
	The yellow means "forbidden"	1		1	1			1				1	1			1	
		2%		1.0%	4%			5%				8%	5%			2%	
	It's dangerous	1		1	1		1					1	1			1	
		2%		1.0%	4%		8%					8%	5%			2%	
	You will get hit if you cross when the train comes	1		1		1		1		1			1			1	
		2%		1.0%		4%		5%		5%			5%			2%	
	Wait for the train to pass before crossing	1	1		1		1			1			1			1	
		2%	2%		4%		8%			5%			5%			2%	

			Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
		Total	Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
QA3) What the sign means (all mentions)	A man will cross the tracks	1		1		1			1			1	1			1	
		2%		1.0%		4%			6%			8%	5%			2%	
	You cannot pass because a train is coming	1	1			1		1		1					1	1	
		2%	2%			4%		5%		5%					5%	2%	
	Do not cross because a train is coming	1	1		1		1					1	1			1	
		2%	2%		4%		8%					8%	5%			2%	
	Grade crossing	1	1			1	1				1			1		1	
		2%	2%			4%	8%				6%			1.1%		2%	
	Do not cross after the train has left	1	1			1		1		1			1			1	
		2%	2%			4%		5%		5%			5%			2%	
	Yield right of way to the train	1	1			1	1					1			1	1	
		2%	2%			4%	8%					8%			5%	2%	
	Do not cross when two trains are moving	1	1			1			1	1			1			1	
		2%	2%			4%			6%	5%			5%			2%	
	Be careful not to get hit when crossing the tracks	1		1		1	1				1			1		1	
		2%		1.0%		4%	8%				6%			1.1%		2%	
	There is a hidden train coming	1		1		1		1			1				1	1	
		2%		1.0%		4%		5%			6%				5%	2%	
	People have to be careful if a train comes	1		1		1			1			1	1			1	
		2%		1.0%		4%			6%			8%	5%			2%	
	Go this way	1	1					1		1				1			1
		2%	2%					5%		5%				1.1%			1.4%
Total		506	407	99	258	240	131	210	157	211	167	123	212	94	190	427	72
		100.8%	100.2%	103.0%	101.2%	100.4%	100.8%	100.5%	101.3%	100.0%	100.6%	102.4%	101.4%	100.0%	100.5%	100.9%	100.0%

			Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
		Total	Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	Collegial	University	Yes	No
QA4) Aspects of the sign that led to interpretation (first mention)	The arrow/The red arrow	40	38	2	24	15	10	16	13	14	16	10	17	9	14	34	6
		27.4%	33.3%	6.3%	32.4%	21.7%	27.0%	24.6%	32.5%	24.6%	30.2%	30.3%	25.8%	33.3%	29.2%	26.8%	35.3%
	The train	39	22	17	21	18	11	14	13	17	13	9	23	5	11	36	3
		26.7%	19.3%	53.1%	28.4%	26.1%	29.7%	21.5%	32.5%	29.8%	24.5%	27.3%	34.8%	18.5%	22.9%	28.3%	17.6%
	The man/The person	21	17	4	11	10	5	13	3	11	6	4	11	4	5	20	1
		14.4%	14.9%	12.5%	14.9%	14.5%	13.5%	20.0%	7.5%	19.3%	11.3%	12.1%	16.7%	14.8%	10.4%	15.7%	5.9%
	The yellow colour	12	8	4	5	6	3	4	4	6	3	1	5	2	4	12	
		8.2%	7.0%	12.5%	6.8%	8.7%	8.1%	6.2%	10.0%	10.5%	5.7%	3.0%	7.6%	7.4%	8.3%	9.4%	
	The rails	10	10		5	5	4	6		2	4	3	2	4	3	7	2
		6.8%	8.8%		6.8%	7.2%	10.8%	9.2%		3.5%	7.5%	9.1%	3.0%	14.8%	6.3%	5.5%	11.8%
	The red colour	6	6		5	1	1	1	4	2	2	2	2	1	3	5	1
		4.1%	5.3%		6.8%	1.4%	2.7%	1.5%	10.0%	3.5%	3.8%	6.1%	3.0%	3.7%	6.3%	3.9%	5.9%
	DNK/DNR	6	4	2	1	5	1	4	1	2	3	1	3	1	1	5	1
		4.1%	3.5%	6.3%	1.4%	7.2%	2.7%	6.2%	2.5%	3.5%	5.7%	3.0%	4.5%	3.7%	2.1%	3.9%	5.9%
	Two trains	3	2	1	1	1		2	1	1	1	1	1		2	2	1
		2.1%	1.8%	3.1%	1.4%	1.4%		3.1%	2.5%	1.8%	1.9%	3.0%	1.5%		4.2%	1.6%	5.9%
	The train with the arrow/ The red arrow	2		2		2	1	1			2				2	1	
		1.4%		6.3%		2.9%	2.7%	1.5%			3.8%				4.2%	.8%	
	He got on the wrong train	1	1			1	1				1				1		1
		.7%	.9%			1.4%	2.7%				1.9%				2.1%		5.9%
	If the person walks they'll get hit	1	1		1			1			1				1	1	
		.7%	.9%		1.4%			1.5%			1.9%				2.1%	.8%	
	The train is there to prevent you from crossing	1	1			1		1		1			1			1	
		.7%	.9%			1.4%		1.5%		1.8%			1.5%			.8%	
	The yellow "Attention"	1	1			1			1			1			1	1	
		.7%	.9%			1.4%			2.5%			3.0%			2.1%	.8%	
	The diamond shape (sign)	1	1			1		1				1		1		1	
		.7%	.9%			1.4%		1.5%				3.0%		3.7%		.8%	
	The whole sign	1	1			1		1			1						1
		.7%	.9%			1.4%		1.5%			1.9%						5.9%
	The sign doesn't have a circle with a red line through it	1	1			1				1			1			1	
		.7%	.9%			1.4%				1.8%			1.5%			.8%	
Total		146	114	32	74	69	37	65	40	57	53	33	66	27	48	127	17
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

			Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
		Total	Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
QA4) Aspects of the sign that led to interpretation (*first mention*)	*The arrow/The red arrow*	61	49	12	38	22	18	24	18	19	28	14	25	13	23	54	7
		41.8%	43.0%	37.5%	51.4%	31.9%	48.6%	36.9%	45.0%	33.3%	52.8%	42.4%	37.9%	48.1%	47.9%	42.5%	41.2%
	The train	56	35	21	33	23	15	23	17	24	18	14	31	11	13	52	4
		38.4%	30.7%	65.6%	44.6%	33.3%	40.5%	35.4%	42.5%	42.1%	34.0%	42.4%	47.0%	40.7%	27.1%	40.9%	23.5%
	The man/The person	43	29	14	22	21	13	19	11	21	14	7	23	7	12	41	2
		29.5%	25.4%	43.8%	29.7%	30.4%	35.1%	29.2%	27.5%	36.8%	26.4%	21.2%	34.8%	25.9%	25.0%	32.3%	11.8%
	The yellow colour	21	12	9	11	9	5	9	6	7	10	2	8	4	8	20	1
		14.4%	10.5%	28.1%	14.9%	13.0%	13.5%	13.8%	15.0%	12.3%	18.9%	6.1%	12.1%	14.8%	16.7%	15.7%	5.9%
	The rails	15	14	1	8	7	5	8	2	4	6	4	6	4	4	11	3
		10.3%	12.3%	3.1%	10.8%	10.1%	13.5%	12.3%	5.0%	7.0%	11.3%	12.1%	9.1%	14.8%	8.3%	8.7%	17.6%
	The red colour	10	10		7	3	2	1	7	4	3	3	5	1	4	8	2
		6.8%	8.8%		9.5%	4.3%	5.4%	1.5%	17.5%	7.0%	5.7%	9.1%	7.6%	3.7%	8.3%	6.3%	11.8%
	DNK/DNR	6	4	2	1	5	1	4	1	2	3	1	3	1	1	5	1
		4.1%	3.5%	6.3%	1.4%	7.2%	2.7%	6.2%	2.5%	3.5%	5.7%	3.0%	4.5%	3.7%	2.1%	3.9%	5.9%
	The train with the arrow/ The red arrow	5		5	1	4	1	2	1	1	4		1		4	4	
		3.4%		15.6%	1.4%	5.8%	2.7%	3.1%	2.5%	1.8%	7.5%		1.5%		8.3%	3.1%	
	Two trains	3	2	1	1	1		2	1	1	1	1	1		2	2	1
		2.1%	1.8%	3.1%	1.4%	1.4%		3.1%	2.5%	1.8%	1.9%	3.0%	1.5%		4.2%	1.6%	5.9%
	The diamond shape (sign)	2	1	1		2		1	1		1	1	1	1		2	
		1.4%	9%	3.1%		2.9%		1.5%	2.5%		1.9%	3.0%	1.5%	3.7%		1.6%	
	The sign doesn't have a circle with a red line through it	2	2		1	1			1	2			2			2	
		1.4%	1.8%		1.4%	1.4%			2.5%	3.5%			3.0%			1.6%	
	He got on the wrong train	1	1			1	1				1				1		1
		7%	9%			1.4%	2.7%				1.9%				2.1%		5.9%
	If the person walks they'll get hit	1	1		1			1			1				1	1	
		7%	9%		1.4%			1.5%			1.9%				2.1%	8%	
	The train is there to prevent you from crossing	1	1			1		1		1			1			1	
		7%	9%			1.4%		1.5%		1.8%			1.5%			8%	
	The yellow "Attention"	1	1			1			1			1			1	1	
		7%	9%			1.4%			2.5%			3.0%			2.1%	8%	
	The box on the right	1		1		1		1			1				1	1	
		7%		3.1%		1.4%		1.5%			1.9%				2.1%	8%	
	The whole sign	1	1			1		1			1						1
		7%	9%			1.4%		1.5%			1.9%						5.9%
Total		146	114	32	74	69	37	65	40	57	53	33	66	27	48	127	17
		157.5%	143.0%	209.4%	167.6%	149.3%	164.9%	149.2%	167.5%	150.9%	173.6%	145.5%	162.1%	155.6%	156.3%	161.4%	135.3%

		Total	Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
			Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
QB1) Number of visits to the station or intersection in the past week	First time	28	28		16	12	28			8	8	12	8	3	17	26	2
		5.6%	7.0%		6.3%	5.1%	21.4%			3.8%	4.8%	10.0%	3.8%	3.2%	9.1%	6.2%	2.9%
	2 or 3 times	30	27	3	17	12	30			5	14	10	5	4	21	21	9
		6.0%	6.7%	3.1%	6.7%	5.1%	22.9%			2.4%	8.5%	8.3%	2.4%	4.3%	11.2%	5.0%	12.9%
	4 or 5 times	73	48	25	39	34	73			15	34	22	25	17	30	62	9
		14.7%	12.0%	25.8%	15.3%	14.3%	55.7%			7.2%	20.6%	18.3%	12.0%	18.3%	16.0%	14.7%	12.9%
	6 to 10 times	210	168	42	105	102		210		96	64	49	84	45	75	176	33
		42.2%	41.9%	43.3%	41.2%	43.0%		100.0%		45.9%	38.8%	40.8%	40.2%	48.4%	40.1%	41.8%	47.1%
	More than 10 times	157	130	27	78	77			157	85	45	27	87	24	44	135	17
		31.5%	32.4%	27.8%	30.6%	32.5%			100.0%	40.7%	27.3%	22.5%	41.6%	25.8%	23.5%	32.3%	24.3%
Total		498	401	97	255	237	131	210	157	209	165	120	209	93	187	421	70
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

		Total	Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
			Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
QB2) Age category	Under 18	147	133	14	72	74	14	66	65	147			143			135	10
		29.3%	33.1%	14.1%	28.3%	30.8%	10.9%	31.6%	41.4%	69.7%			67.8%			31.9%	13.9%
	18 to 24	64	45	19	30	33	14	30	20	64			20	29	14	60	3
		12.8%	11.2%	19.2%	11.8%	13.8%	10.9%	14.4%	12.7%	30.3%			9.5%	31.2%	7.4%	14.2%	4.2%
	25 to 34	79	60	19	45	34	29	30	19		79		9	19	50	66	13
		15.8%	14.9%	19.2%	17.7%	14.2%	22.7%	14.4%	12.1%		47.3%		4.3%	20.4%	26.5%	15.6%	18.1%
	35 to 44	88	68	20	45	41	27	34	26		88		13	21	52	68	18
		17.6%	16.9%	20.2%	17.7%	17.1%	21.1%	16.3%	16.6%		52.7%		6.2%	22.6%	27.5%	16.1%	25.0%
	45 to 54	68	54	14	36	32	25	30	13			68	9	15	44	55	13
		13.6%	13.4%	14.1%	14.2%	13.3%	19.5%	14.4%	8.3%			55.3%	4.3%	16.1%	23.3%	13.0%	18.1%
	55 to 64	37	30	7	22	13	13	12	9			37	9	6	22	25	11
		7.4%	7.5%	7.1%	8.7%	5.4%	10.2%	5.7%	5.7%			30.1%	4.3%	6.5%	11.6%	5.9%	15.3%
	65 and over	18	12	6	4	13	6	7	5			18	8	3	7	14	4
		3.6%	3.0%	6.1%	1.6%	5.4%	4.7%	3.3%	3.2%			14.6%	3.8%	3.2%	3.7%	3.3%	5.6%
Total		501	402	99	254	240	128	209	157	211	167	123	211	93	189	423	72
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

			Interview location		Gender		Number of visits to the station			Age			Scolarité			Born in Canada	
		Total	Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
QB3) Level of education	Elementary or less	99	90	9	48	50	13	50	34	93	2	4	99			89	8
		20.0%	22.7%	9.1%	18.9%	21.3%	10.0%	24.5%	21.9%	45.1%	1.2%	3.3%	46.7%			21.2%	11.3%
	High School	113	76	37	57	55	25	34	53	70	20	22	113			101	12
		22.8%	19.1%	37.4%	22.4%	23.4%	19.2%	16.7%	34.2%	34.0%	12.2%	17.9%	53.3%			24.1%	16.9%
	College/ trade school/ CEGEP	94	68	26	58	34	24	45	24	29	40	24		94		78	14
		19.0%	17.1%	26.3%	22.8%	14.5%	18.5%	22.1%	15.5%	14.1%	24.4%	19.5%		100.0%		18.6%	19.7%
	University	190	163	27	91	96	68	75	44	14	102	73			190	151	37
		38.3%	41.1%	27.3%	35.8%	40.9%	52.3%	36.8%	28.4%	6.8%	62.2%	59.3%			100.0%	36.0%	52.1%
Total		496	397	99	254	235	130	204	155	206	164	123	212	94	190	419	71
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

			Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
		Total	Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
QB4) Born in Canada	Yes	427	333	94	218	208	109	176	136	195	134	94	190	78	151	427	
		85.6%	82.6%	97.9%	85.8%	87.4%	84.5%	84.2%	88.9%	93.8%	81.2%	77.0%	90.5%	84.8%	80.3%	100.0%	
	No	72	70	2	36	30	20	33	17	13	31	28	20	14	37		72
		14.4%	17.4%	2.1%	14.2%	12.6%	15.5%	15.8%	11.1%	6.3%	18.8%	23.0%	9.5%	15.2%	19.7%		100.0%
Total		499	403	96	254	238	129	209	153	208	165	122	210	92	188	427	72
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

			Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
		Total	Montreal West	St Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
QB5) Place of birth	United States	9	7	2	5	4	2	6	1	3	4	2	4	1	4		9
		12.7%	10.1%	100.0%	13.9%	13.8%	10.5%	18.2%	5.9%	23.1%	13.3%	7.1%	20.0%	7.1%	11.1%		12.7%
	Central and South America	2	2		2		1	1			1	1		1	1		2
		2.8%	2.9%		5.6%		5.3%	3.0%			3.3%	3.6%		7.1%	2.8%		2.8%
	Caribbean	6	6		3	2	3	2	1		4	2	4		2		6
		8.5%	8.7%		8.3%	6.9%	15.8%	6.1%	5.9%		13.3%	7.1%	20.0%		5.6%		8.5%
	Eastern Europe	6	6		3	3	2	2	2	1	5		1	1	4		6
		8.5%	8.7%		8.3%	10.3%	10.5%	6.1%	11.8%	7.7%	16.7%		5.0%	7.1%	11.1%		8.5%
	Northern Africa	4	4		1	3		1	3	1	2	1	1	1	2		4
		5.6%	5.8%		2.8%	10.3%		3.0%	17.6%	7.7%	6.7%	3.6%	5.0%	7.1%	5.6%		5.6%
	Asia	7	7		4	3	2	3	2	3	3	1	3	1	3		7
		9.9%	10.1%		11.1%	10.3%	10.5%	9.1%	11.8%	23.1%	10.0%	3.6%	15.0%	7.1%	8.3%		9.9%
	India	4	4		1	2		3	1	1	1	2	1	1	2		4
		5.6%	5.8%		2.8%	6.9%		9.1%	5.9%	7.7%	3.3%	7.1%	5.0%	7.1%	5.6%		5.6%
	Vietnam	3	3		2	1	1	2			2	1		1	1		3
		4.2%	4.3%		5.6%	3.4%	5.3%	6.1%			6.7%	3.6%		7.1%	2.8%		4.2%
	New Zealand	1	1		1		1					1			1		1
		1.4%	1.4%		2.8%		5.3%					3.6%			2.8%		1.4%
	Western Europe	25	25		13	10	5	11	7	3	7	15	6	5	14		25
		35.2%	36.2%		36.1%	34.5%	26.3%	33.3%	41.2%	23.1%	23.3%	53.6%	30.0%	35.7%	38.9%		35.2%
	Africa and Southern Africa	3	3		1		2	1		1	1	1		1	2		3
		4.2%	4.3%		2.8%		10.5%	3.0%		7.7%	3.3%	3.6%		7.1%	5.6%		4.2%
	Iceland	1	1			1		1				1		1			1
		1.4%	1.4%			3.4%		3.0%				3.6%		7.1%			1.4%
Total		71	69	2	36	29	19	33	17	13	30	28	20	14	36		71
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%

		Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
	Total	Montreal West	St Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
Gender Female	258	208	50	258		72	105	78	102	90	62	105	58	91	218	36
	51.8%	52.1%	50.5%	100.0%		55.4%	50.7%	50.3%	48.8%	54.5%	51.7%	50.0%	63.0%	48.7%	51.2%	54.5%
Male	240	191	49		240	58	102	77	107	75	58	105	34	96	208	30
	48.2%	47.9%	49.5%		100.0%	44.6%	49.3%	49.7%	51.2%	45.5%	48.3%	50.0%	37.0%	51.3%	48.8%	45.5%
Total	498	399	99	258	240	130	207	155	209	165	120	210	92	187	426	66
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

		Total	Interview location		Gender		Number of visits to the station			Age			Education			Born in Canada	
			Montreal West	St. Basile	Male	Female	5 or less	6 to 10	More than 10	Under 25	25 to 44	45 and over	Elementary + High School	College	University	Yes	No
Language of respondent	French	185	87	98	94	90	62	77	43	55	77	51	60	48	75	165	17
		36.6%	21.4%	99.0%	36.4%	37.5%	47.3%	36.7%	27.4%	26.1%	46.1%	41.5%	28.3%	51.1%	39.5%	38.6%	23.6%
	English	321	320	1	164	150	69	133	114	156	90	72	152	46	115	262	55
		63.4%	78.6%	1.0%	63.6%	62.5%	52.7%	63.3%	72.6%	73.9%	53.9%	58.5%	71.7%	48.9%	60.5%	61.4%	76.4%
Total		506	407	99	258	240	131	210	157	211	167	123	212	94	190	427	72
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Transportation Development Centre

800 René Lévesque Blvd. West
Suite 600
Montreal, Quebec
H3B 1X9

www.tc.gc.ca/tdc/index.htm